4070 Subwoofer

Owners' Manual

40 series

Gale

Scale NTS (Orig Only)	Colour Definition Pantone BLACK 100%	Drawing Title Gale 4070 manual		Revisions & Date 1: 31/05/05 2: 3: 4: 5:
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Introduction

Congratulations on purchasing this Gale 4070 subwoofer. To ensure optimum performance please read and retain this manual, then sit back, relax and enjoy!

Please read and retain this manual, it contains useful information that will ensure you get the very best from your new loudspeakers.

Note:
This model is supplied in two mains voltage ratings. Please refer to product rear panel for rating.

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Important Safety Precautions

For safety reasons please read the following instructions and the enclosed Important Safety Information carefully before attempting to connect your subwoofer unit to the mains.

Warning

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Caution

Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.

Caution

To reduce the risk of electric shock, do not remove cover (or back). There are no user-serviceable parts inside. Please refer all servicing to a qualified engineer.

The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

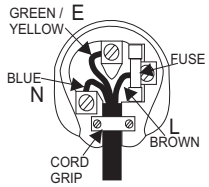
The exclamation point within an equilateral triangle isintend ed to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This product complies with European Low Voltage (73/23/EEC) and Electromagnetic Compatibility (89/336/EEC) Directives when used according to this instruction manual.

CE

Plug Fitting Instructions (UK only)

The cord supplied with this appliance is factory fitted with a 13A mains plug fitted with a 3A fuse inside. If it is necessary to change the fuse, it is important that a 3A one is used. If the plug needs to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug must then be disposed of safely, as insertion into a 13A socket is likely to cause an electrical hazard. Should it be necessary to fit a 3-pin BS mains plug to the power cord the wires should be fitted as shown in this diagram. The colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug. Connect them as follows:-



- The wire which is coloured BLUE must be connected to the terminal which is marked with the letter 'N' or coloured BLACK.
- The wire which is coloured BROWN must be connected to the terminal which is marked with the letter 'L' or coloured RED
- The wire which is coloured GREEN/YELLOW must be connected to the terminal which is marked with the letter 'E' or coloured GREEN.

Note

If a 13 Amp (BS 1363) type of plug is used a 3 Amp or 5 Amp fuse must be fitted, either in the plug or adaptor, or on the distribution board.

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Important Safety Precautions

Read Instructions - All the safety and operating instructions should be read before the product is operated

Retain Instructions - The safety and operating instructions should be retained for future reference.

Heed Warnings - All warnings on the product and the operating instructions should be adhered to.

Follow instructions - All operating and use instructions should be followed.

Cleaning - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

Water and Moisture - Do not use this product near water - for example, near a bath tub, wash bowl or kitchen sink; in a wet basement, or near a swimming pool etc.

Wall or Ceiling Mounting - The product should be mounted to a wall or ceiling only as recommended by the manufacturer

Accessories - Do not place this product on an unstable surface, stand, bracket or table. The product may fall, causing serious injury to child or adult, and serious damage to the product. Use only a surface, stand bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

A product and stand combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the combination to overturn.

Ventilation - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

Power Sources - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

Grounding or Polarization - In some countries this product may be eqiupped with a polarized alternating-current line plug (a plug having one pin wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug into the outlet, try reversing the plug. If the plug still does not fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

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Important Safety Precautions

Alternatively, if this product is equipped with a three-wire grounding-type plug, a plug with a third (grounding) pin, it will only fit into a grounding-type power outlet. This is a safety feature. If the plug does not fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.

ower-Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and point where they exit from the product.

Protective Attachment Plug - The product is equipped with an attachment plug having overload protection. This is a safety feature. See Owners' Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.

Lightning - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

Overloading - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

Object and Liquid Entry - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Servicing - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Service - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following
conditions:

a) When the power-supply cord or plug is damaged
b) If liquid has been spilled, or objects have fallen onto the product
c) If the product has been exposed to rain or water
d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation
e) If the product has been dropped or damaged in any way
f) When the product exhibits a distinct change in performance - this indicates a need for service

Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorised substitutions may result in fire, electric shock, or other hazards.

Safety Checks - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

Heat - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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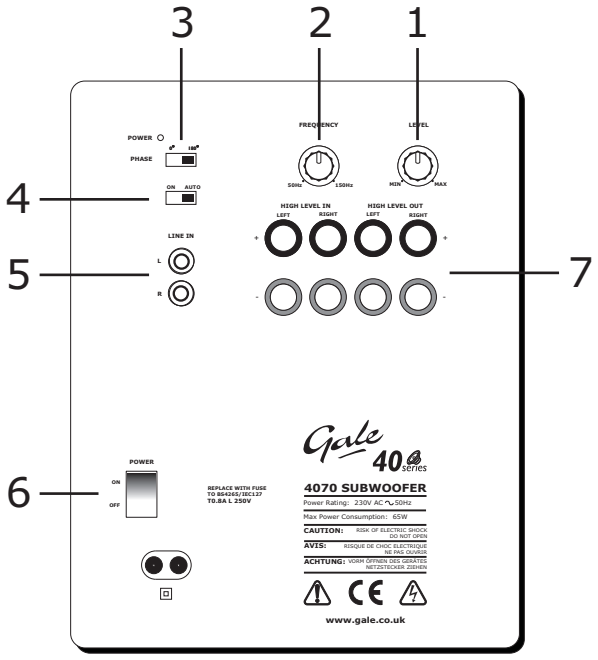
Subwoofer Controls



1. Level

This control allows you to adjust the volume of low frequency output from your subwoofer amplifier to obtain the best sound-balance within your surroundings

2. Frequency

This is used to adjust the point at which the crossover will separate the low frequencies being used by the subwoofer from the higher frequencies played by the rest of the system. Raising the Low Frequency Cut-Off will increase the frequency range that the 4070 will reproduce. Lowering the Low Frequency Cut-Off will limit the range of frequencies reproduced.

3. Phase

This allows you to optimise the phase of your 4070 to different listening positions and that of other speaker systems used at the same time.

4. Power Auto/On

If switched to auto, the subwoofer will remain in standby mode until a signal is detected at the input. The unit will then automatically switch itself on. It will then automatically return to standby mode if no input signal is present for approximately 5 minutes. With the switch in the 'ON' position the unit remains permanently on as long as the main power switch is on. The LED positioned on the rear panel indicates whether the unit is on or in standby mode (red for standby and green when on).

5. Line Input

If your amplification system has a dedicated subwoofer line output it should be connected here (see fig.1 opposite).

6. Power Switch

Turns the subwoofer on and off

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Subwoofer Controls

7. High Level Input / High Level Output

If your amplification system does not have a dedicated subwoofer line output, your subwoofer must be connected via the high level terminals on the rear panel. Connection should be made from the speaker terminals on your amplification system to the High Level Input Connections (see fig.2 below).

To prevent damage to the amplification system, only connect using line level inputs OR high-level inputs:

DO NOT USE BOTH METHODS OF CONNECTION AT THE SAME TIME

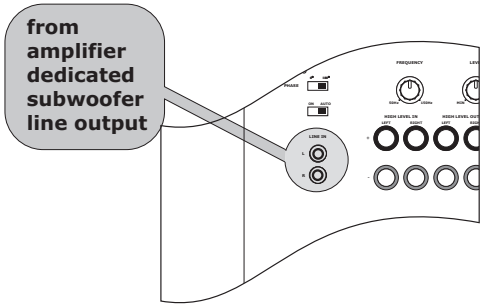

FIG. 1

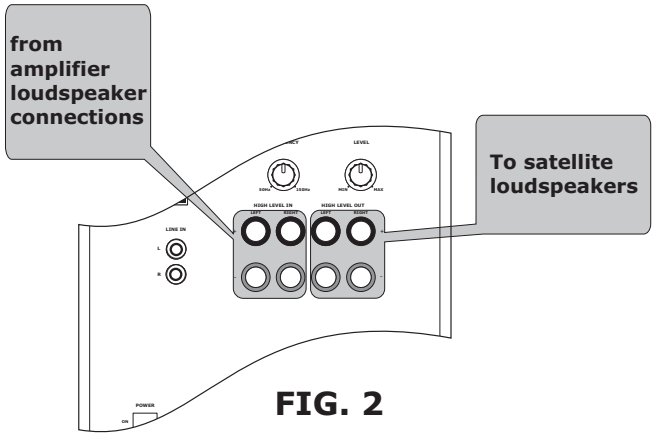

FIG. 2

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Getting Started

Attaching feet to your subwoofer

Your 4070 subwoofer comes with feet and spikes which should be fitted as outlined below.

The spikes attach to the bottom of the feet (as shown below left).

There are eight pilot holes on the bottom of the speakers. The feet are located and secured here with the wood screws supplied (below right). Level as required.

fig. a

fig. b

Connecting via Line Input

If your amplification system has a dedicated subwoofer line output then you should connect your 4070 via the Line Input on the rear panel using a good quality phono lead. Note that if your amplification system has a mono subwoofer line out then use the Left/Mono socket on your 4070.

Connecting via High Level Connections

Do not compromise the performance of your system by using inferior quality cables! Gale recommends that high quality cables of 16 gauge or higher be used. Your professional dealer will give you good advice.

Observing polarity is of the utmost importance while connecting your loudspeakers. Ensure that the red (+) terminals on your amplification system are connected to the red (+) on the subwoofer, and black (-) on your amplification system to black (-) on your subwoofer.

Important Note: Always unplug all A.C. powered components before making any loudspeaker or component connections. This will avoid the risk of electric shock or damage to your equipment.

Running In

Your new unit will require a total of approximately 10 hours of normal use to allow the components to settle into their working routine and reach their optimum performance.

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Getting Started

Positioning your Subwoofer

The positioning of your subwoofer will affect the quantity and also quality of the lower frequencies of the system. Locating the subwoofer near a wall will increase the bass response of the speaker. If it is placed too near to a corner however, the overall effect may be too 'boomy'. Due to the low frequency modal characteristics of the room, the response will change as it is placed a little closer, or further away from the listening position. Adjusting the rear panel controls (as explained in previous sections) will also affect the sound, so the answer is to experiment and find the position and settings that provide a good balance between low frequency amount and definition across a range of source material.

Taking Care of your Subwoofer

Cabinets should be dusted and lightly polished as required. Do not use solvent based cleaners, as they may damage the cabinet surface. Do not expose the cabinets to strong, direct sunlight, high temperatures, high humidity or allow them to become wet.

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4070 Technical Specifications

Frequency Response	40Hz-150Hz
Sensitivity	Line in: 200mV (for max output) Hi Level in: 4V (for max output)
Output Power	65 Watts
Mains Voltage	230 Volts 50 Hz or 115 Volts 50 Hz USA/Canada only
Power Consumption	65 Watts
Drivers	8” Unshielded long throw woofer
Crossover Type	Continuous/Active
Size (H x W x D) mm **Size (H x W x D) Inches**	300 x 300 x 300 11.8 x 11.8 x 11.8
Weight	14.5kg / 31.9 Lbs
Finish	Black Ash / Maple

Gale's policy is one of conitinuous improvement. Design and specifications are therefore subject to change without prior notice

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Warranty Information

Gale warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below). Gale will repair or replace (at Gale's option) this product or any defective parts in this product. Warranty periods may vary from country to country. If in doubt consult your dealer and ensure that you retain proof of purchase

To obtain warranty service, please contact the Gale authorised dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your Gale product, it can be returned by your dealer to Gale or an authorised Gale service agent. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This Warranty is invalid if (a) the factory-applied serial number has been altered or removed from this product or (b) this product was not purchased from a Gale authorised dealer. You may call Gale or your local country Gale distributor to confirm that you have an unaltered serial number and/or you purchased from a Gale authorised dealer.

This Warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product. This Warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than Gale or a Gale dealer or authorised service agent, which is authorised to do Gale warranty work. Any unauthorised repairs will void this Warranty. This Warranty does not cover products sold AS IS or WITH ALL FAULTS.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. GALE SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY IN THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

Some countries and US states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other statutory rights, which vary from state to state or country to country.

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